

Conservation Actions of Government Agencies

As of 2010 there were no specific federal efforts proposed to protect or reintroduce plains bison beyond the boundaries of existing national parks, monuments, or wildlife refuges within the United States (Gates et al., 2010). In 2008 the U.S. Department of the Interior (USDI) published its Bison Conservation Initiative, which is a framework for managing the USDI bison herds. The framework “establishes steps to address the health and genetic composition of DOI bison herds, and acknowledges the ecological and cultural role of bison on



PHOTO CREDIT: S. ADAMS

the American landscape. It proposes specific actions to better manage and integrate bison populations on select Interior lands in 2008 and future years” (USDI, 2008, pp. 3). The initiative states that while it is not feasible to reintroduce widespread herds, “it may be possible to develop partnership arrangements that will permit bison herds to re-create their natural role in areas where biologically suitable and socially acceptable” (USDI, 2008, pp. 3). The initiative also recognizes that the presence of bison in adequate numbers may help support the “restoration or maintenance of other native species and habitats” (USDI, 2008, pp. 3). The strategy will “consider treating the various populations as a larger metapopulation, looking at ways to create and maintain gene flow, as well as protecting private alleles among these small populations by improving genetic management strategies. This framework also committed USDI agencies to expanding herd size if possible, and building cooperation with partners for the conservation of bison. In addition, comprehensive refuge plans are being reviewed to consider the feasibility of attempting bison restoration on large refuge landscapes, such as the Charles M. Russell National Wildlife Refuge” (Gates et al., 2010, pp. 81).

The USDI chartered the DOI Bison Conservation and Management Working Group, which is charged with working to guide management of the USDI herds, one of which is the National Bison Range herd in Moiese, in northwestern Montana. The working group met in early 2009 and again at the end of 2010 (D. Powell and P. Dratch, United States Department of the Interior, personal communication). In 2011 the NPS and USFWS are planning to host a meeting with wildlife health and management experts to address bison health (H. Frost, NPS, personal communication).

The group held the Bison Conservation Genetics Workshop in September 2008. The result of the workshop was an agreement on the basic tenets of genetic management for the USDI herds and discussion of different approaches to achieve these goals (Dratch and Gogan, 2010). The workshop participants established the criteria for a wild bison herd “as one with a large enough population size to prevent loss of genetic variation and with low

levels of cattle or subspecies introgression, and subject to some of the forces of natural selection, including competition for breeding opportunities” (Dratch and Gogan, 2010, pp. 2). Participants agreed that the desired minimum size of a population should be 1,000 individuals, which could be achieved through the establishment of a single population or the management of several smaller populations as a metapopulation (Dratch and Gogan, 2010). The participants evaluated the current status of the USDI herds and noted that while the herds meet the basic threshold for genetic integrity, most are managed well below 1,000 bison, and there are no management plans in place to manage these smaller herds as metapopulations (Dratch and Gogan, 2010).

There was consensus that herds with no evidence of cattle hybridization must be safeguarded from potential introgression of livestock genes, and must be recognized as very important resources (Dratch and Gogan, 2010). The participants noted that while none of the USDI herds are “subject to the full range of historic natural selective forces that influence genetic variation, management actions should maximize population size, minimize selection for docility and other traits related to domestication, strive for an even sex ratio considering differential survival, and minimally interfere with social behavior” (Dratch and Gogan, 2010, pp. 2). Participants further recognized that USDI herds have “a crucially important role in long-term bison conservation” (Dratch and Gogan, 2010, pp. 2). They noted that almost all USDI herds must be increased in size to avoid negative genetic effects, and since most of the herds “are generally at or near capacity within federal boundaries, establishing satellite herds that can contribute to metapopulations is an important first step. Further, managing bison herds across current jurisdictional boundaries is an important step to long-term bison conservation” (Dratch and Gogan, 2010, pp. 2).

The USFS Region I is a full participant in the IBMP. The Gallatin National Forest has had the lead in the USFS Northern Region, and conservation efforts have included the closure of certain areas of the forest to cattle grazing where the grazing permit was waived back to the USFS with no preferred applicant (L. Weldon, USFS, personal communication). The closure of these regions provides a buffer for disease management, which reduces conflicts regarding disease transmission (Weldon, personal communication).

The USFS conducted an assessment in 2001 of its management of national grasslands in North Dakota, Nebraska, South Dakota, and Wyoming through the Northern Great Plains Management Plans Revision. An alternative that was proposed in early scoping and in comments to the Draft Environmental Impact Statement was the removal of domestic cattle and the restoration of free-ranging wild bison to the National Grasslands. This alternative



PHOTO CREDIT: S. ADAMS

would have required the individual states to assume management responsibility for the bison as wildlife. The Final Impact Statement for the Northern Great Plains Management Plans Revision notes that discussions indicated that those states were not interested in accepting the responsibility for management of bison (USFS, 2001). The USFS notes that the need for bison grazing over cattle grazing was not identified in the Purpose and Need section of the management plan (USFS, 2001).

The Final Impact Statement also notes that “bison are not listed by the USFWS as a threatened or endangered species; therefore, there is no requirement under the Endangered Species Act for formal bison restoration” (USFS, 2001, pp. 2–14). The last Threatened, Endangered, and Sensitive Species List, which guides the USFS wildlife programs, was published in 2004.

The USFS evaluated plains bison for Sensitive Species status in Region I in 2010, but plains bison were not recommended to be included on the Regional Forester’s Sensitive Species List (Weldon, personal communication). There are bison present in a limited number of other USFS regions, but there do not appear to be conservation programs or initiatives outside of the Northern Region (Weldon, personal communication).

The USFS does not have an official position on the reintroduction of bison on forest service land in Montana, and Weldon notes that “the reintroduction of bison has not gone through a public process and the Forest Service may need to do a NEPA analysis if USFS lands are included in a bison reintroduction proposal” (personal communication). However, the USFS has stated that it is “prepared to work with the State of Montana to evaluate specific proposals as they are developed” (Weldon, personal communication).

Charles M. Russell National Wildlife Refuge

The Charles M. Russell National Wildlife Refuge (CMR) encompasses approximately 1.1 million acres in north-central Montana including portions of Fergus, Petroleum, Garfield, McCone, Valley, and Phillips Counties. The USFWS and its partners manage the CMR under the National Wildlife Refuge System Administration Act of 1966, which states that “the mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restorations of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans” (USFWS, 2010).

Each refuge is then managed to fulfill the specific purpose for which it was established. The CMR was established in 1936 under Executive Order 7509 so “that the natural forage resources therein shall be first utilized for the purpose of sustaining in a healthy condition a maximum of 400,000 sharp-tailed grouse, and 1,500 antelope, the primary species, and such nonpredatory secondary species in such numbers as may be necessary to maintain a balanced wildlife population, but in no case shall the consumption of the forage by the combined populations of the wildlife species be allowed to increase the burden of the range dedicated to the primary species. Provided further, that all the forage

resources within this range or preserve shall be available, except as herein otherwise provided with respect to wildlife, for domestic livestock . . . And provided further, that land within the exterior limits of the area herein described . . . may be utilized for public grazing purposes only to the extent as may be determined by the said Secretary to be compatible with the utilization of said lands for the purposes for which they were acquired” (USFWS, 2010, pp. xvi–xvii).

The USFWS is in the process of developing a Comprehensive Conservation Plan (CCP), which will guide the management of the refuge for 15 years. The USFWS released a Draft Comprehensive Conservation Plan and Environmental Impact Statement in September 2010 for 84 days of public review and comment. The goal is to release the Final Comprehensive Conservation Plan and Environmental Impact Statement in the spring of 2012, and to have a Record of Decision, which will outline the chosen management plan, by the summer of 2012.

As part of the development of the CCP, the USFWS developed a vision for the refuge, which describes the focus of management of the refuge and “portrays a picture of the refuge in 15 years” (USFWS, 2010, pp. xix). Part of the vision emphasizes the importance of the refuge as “an outstanding example of a functioning, intact landscape in an ever-changing West. Working together with our neighbors and partners, the Service employs adaptive management rooted in science to protect and improve the biological integrity, biological diversity, and environmental health of the refuge’s wildlife and habitat resources” (USFWS, 2010, pp. xix).

The USFWS developed eight goals to direct the work of achieving the vision and



Cottonwood bottoms of the Missouri River within the CMR.

PHOTO CREDIT: M. OAKS/THE WILDERNESS SOCIETY; COURTESY USFWS

purpose of the refuge. One of these goals is to “conserve, restore, and improve the biological integrity, environmental health, and ecological diversity of the refuge’s plant and animal communities of the Missouri River breaks and surrounding prairies to support healthy populations of native plants and wildlife” (USFWS, 2010, pp. xix). A second goal is to “contribute to the identification, preservation, and recovery of threatened and endangered species and species of concern that occur or have historically occurred in the northern Great Plains” (USFWS, 2010, pp. xix). One of the significant issues to be addressed within the Draft Comprehensive Conservation Plan and Environmental Impact Statement is “species

reintroductions or management of species that could move onto the refuge: American bison . . .” (USFWS, 2010, pp. 11).

The USFWS “has taken the position that it will not consider reintroducing bison on the refuge unless FWP initiates an effort to restore bison as a wildlife species on a larger landscape. The Service recognizes the State’s role in managing native wildlife and would work cooperatively with FWP in the development of a bison restoration plan. FWP does not have any plans at this time to consider reintroducing a free-ranging herd of bison in the area. The Service has no desire to manage another high fence captive bison herd on Service lands” (USFWS, 2010, pp. 93).

The Draft CCP presents four alternatives for public review. Alternative A, No Action, does not set any objectives for the restoration of bison (USFWS, 2010, pp. 93). Under Alternative C, Public Use and Economic Use Emphasis, the USFWS would not actively work to restore bison to the refuge, but “if bison are restored to areas outside the refuge, and animals migrate into the refuge as State-managed wildlife species, the refuge would adopt the FWP management plan (USFWS, 2010, pp. 93). The rationale for this objective “attempts to balance economic uses, such as livestock grazing, with bison restoration by not intending to actively restore bison on the refuge, but passively accepting bison as wildlife to be managed in accordance with FWP management guidelines” (USFWS, 2010, pp. 93–94).

Objective B, Wildlife and Habitat Emphasis, and Objective D, Ecological Processes Emphasis (Proposed Action), would “over 15 years, continue to work with FWP, conservation organizations and neighbors to evaluate the economic, social and biological feasibility of restoring bison as a natural component on the surrounding landscape” (USFWS, 2010, pp. 93). If FWP proposed a reintroduction plan that includes the CMR, the USFWS would work to develop a “step-down framework defining under what conditions the refuge would participate” (USFWS, 2010, pp. 93). Within one year of the development of the framework, the USFWS would work in cooperation with FWP and other partners to develop a bison management plan that “specifies and ranks areas of suitable habitat, establishes appropriate abundance, composition and distribution targets based on habitat conditions and appropriate for management of wildlife and recreation on a national wildlife refuge, and details cooperative management responses to be applied to anticipated conflict situations” (USFWS, 2010, pp. 93).



Habitat in the CMR. PHOTO CREDIT: S. ADAMS

The rationale for bison restoration under Alternatives B and D are that while the USFWS recognizes the ecological significance of bison, it also recognizes the complexity and

controversy associated with a restoration effort. The USFWS would therefore want to “work cooperatively and collaboratively with others as a full partner in any proposal with full engagement of the public” (USFWS, 2010, pp. 93). The USFWS would implement the following strategies concurrently with any proposal by FWP for bison restoration. The USFWS would “work with FWP, major universities, World Wildlife Fund, The Nature Conservancy, American Prairie Foundation, and others to develop and carry out research proposals to evaluate the biological, social, and economic feasibility of restoring free-ranging bison in and around the refuge”; would “work with a variety of economists to determine the potential economic effects/impacts of a free-ranging herd in the area”; and prior to reintroduction would “finalize a cooperative bison management plan, developed and agreed to by all involved management parties, that addresses population objectives and management, movement of animals outside restoration areas, genetic conservation and management, disease management and conflict resolution procedures” (USFWS, 2010, pp. 93).